AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1.(Original) Linear perfluoropolyethers having the following structure formula:

$$T-O(CF_2O)_n(CF_2CF_2O)_m(CF_2CF_2CF_2O)_r(CF_2CF_2CF_2CF_2O)_s-T_1 \quad (I)$$

wherein:

- T and T₁, equal to or different from each other are selected from CF₃-, CF₃-CF₂-, C₃F₇-, C₄F₉-, CICF₂-, CICF₂CF₂-;
- n, m, r, s are integers such that the number average molecular weight is comprised between 700 and 100,000, preferably between 1,500 and 20,000;
- the m/n ratio is comprised between 2 and 20, preferably between 2 and 10;
- the (r+s)/(n+m+r+s) ratio is comprised between 0.05 and 0.2, preferably between 0.07 and 0.2;
- the n/(n+m+r+s) ratio ranges from 0.05 to 0.40, preferably from 0.1 to 0.3; wherein the perfluorooxyalkylene units are statistically distributed along the polymeric chain.
- 2.(Original) Perfluoropolyethers according to claim 1, wherein the number average molecular weight is in the range 1,500 20,000 (viscosity between 10 cSt and 1,000 cSt at 20°C).
- 3.(Currently Amended) Perfluoropolyethers according to elaims 1-2claim 1 additioned with thermal stabilizers of perfluoropolyethers.
- 4.(Original) Perfluoropolyethers according to claim 3, wherein the thermal stabilizers are selected from perfluoropolyethers having functionality of the phosphines,

phosphates, phosphazenes, benzothiazoles, triazines, amines, substituted amines type, nitroderivative compounds

- 5.(Currently Amended) Perfluoropolyethers according to claims 1-4claim 1, wherein T and T₁, besides the indicated meanings, are also -(CF₂)_zCOF wherein z = 0, 1, 2, 3, and wherein the total moles of the end groups comprise from 0.5% by moles to 50% by moles of -COF groups.
- 6.(Currently Amended) Perfluoropolyethers according to claims 1-5claim 1, wherein the COF end groups are transformed into other functional groups.
- 7.(Original) Perfluoropolyethers according to claim 6, wherein the functional end groups are selected from COOH, COOR (with R=CH₃, C₂H₅, C₃H₇), aminic, alcoholic, aldehydic, salts, nitrilic, amidic functional groups.
- 8.(Original) A process for the preparation of the formula (I) perfluoropolyethers according to claim 1 comprising the following steps:
 - a) preparation of the compound of claim 5 by addition, under stirring, of the formula (III) peroxidic compound:

$$T_4-O(CF_2O)_{n'}(CF_2CF_2O)_{m'}(O)_{h}-T_5$$
 (III)

wherein T_4 , T_5 , equal to or different from each other, are selected from CF_3 -, CF_3CF_2 -, -COF, $-CF_2COF$, XCF_2 -, XCF_2CF_2 - wherein X = CI, $-OR''_f$ wherein R''_f is a C_1 - C_3 perfluoroalkyl,

having a n'/(n'+m') ratio from 0.05 to 0.25 and a h/(n'+m') ratio from 0.1 to 0.3 and a PO (peroxidic content) content, defined as grams of active oxygen/100 grams of compound, from 1.8 to 4, preferably from 2 to 3.8,

to a reaction medium formed by a perfluoropolyether oil, contained in a reactor, maintained at a constant temperature in the range 150°C-250°C, preferably 230-250°C, so as to have a PO of the reaction mixture between 0 and 0.5, preferably between 0 and 0.2, by continuously extracting the reaction mixture and heating the collected fractions not containing the initial perfluoropolyether oil at temperatures comprised between 220 and 250°C until complete removal of the residual peroxidic groups, obtaining the claim 5 compound;

- b) fluorination of the compound obtained in a) with the obtainment of the formula (I) compound.
- 9.(Original) A process according to claim 8, wherein the step a) is carried out by using as reaction medium, instead of a perfluoropolyether oil, the perfluoropolyether of claim 5.
- 10.(Currently Amended) A process according to claims 8-9claim 8, wherein in step a) the compound (III) is added to the preheated reaction medium, with a flow-rate comprised between 0.1 and 1.3 kg/h per Kg of reaction medium.
- 11.(Currently Amended) A process according to claims 8-10claim 8, wherein after stepb) the compound (I) is subjected to molecular distillation to separate fractions having a different molecular weight.
- 12.(Currently Amended) A process according to claims 8-11claim 8, wherein the perfluropolyether oil to be used in the preparation of the compounds of formula (I) and of claim 5 is a perfluoropolyether of formula (A)

$R_fO(C_2F_4O)_p(CF_2O)_qR_f'$ (A)

with R_f and R_f ' equal to or different from each other selected from CF_{3^-} , $C_2F_{5^-}$, $CICF_{2^-}$, $CICF_2CF_{2^-}$; p and q are variable indexes, whose sum gives the number average molecular weight and whose p/q ratio ranges from 0.1 to 10.

- 13.(Currently Amended) Use of the perfluoropolyethers of claims 1-4claim 1 as lubricants.
- 14.(Currently Amended) Use of the perfluoropolyethers of claims 5-7claim 5 to confer hydro- and oil-repellence to surfaces.